



Maintenance of Certification Part 4: ABR Guide to Practice Quality Improvement (PQI) Projects 2015

Background

Quality and safety in medical care have become a national priority. Part 4 of the ABR's Maintenance of Certification (MOC) program—Practice Quality Improvement, or PQI—permits radiologists to demonstrate their commitment to this enterprise and, in some instances, their compliance with associated external requirements. Part 4 requirements may be satisfied through completion of PQI Projects. This document provides detailed information on PQI Projects, which facilitate improvement of medical care and/or its delivery as an individual, a group, or an institution.

General Information

Practice quality improvement (PQI) Projects serve to engage diplomates in the proper application of quality improvement principles. This has been the classic approach to PQI Projects since the inception of MOC.

Learning about PQI

The best way to begin individual participation in a PQI Project is to learn about the rationale for its inclusion in MOC, the goals of PQI efforts, and how to choose and complete a project. A good place for a new MOC participant to start is by reviewing the following pages on the ABR website:

- Diagnostic radiologists: <http://www.theabr.org/moc-dr-comp4>
- Radiation oncologists: <http://www.theabr.org/moc-ro-comp4>
- Medical physicists: <http://www.theabr.org/moc-rp-comp4>

The concepts are straightforward and easily acquired.

PQI Participation Requirements

With the implementation of Continuous Certification and its annual look-back approach, diplomates must have completed at least one PQI Project or Participatory Quality Improvement Activity in the previous three years at each annual look-back. The first evaluation of Part 4 participation will take place during the 2016 MOC annual look-back.

Each PQI Project includes certain required elements, which are outlined below. Documentation and record-keeping are also important components. Under usual circumstances, these documents are not submitted to the ABR. However, because a percentage of MOC participants is audited each year, the diplomate must retain all source documentation for each PQI Project in case he or she is selected for an audit. These records include, but are not limited to, the following:

- Measurements made

- Data analysis performed and conclusions reached
- Action plans for practice improvements implemented
- A final paragraph of narrative self-reflection on the impact of the project, written after completion

PQI Projects and the PDSA Process

PDSA stands for “Plan–Do–Study–Act,” a four-step process commonly used for continuous quality improvement. This simple but powerful tool may serve as the basis for an action-oriented iterative process by linking multiple PDSA cycles repeated in sequence. An initial cycle is performed to obtain baseline data, followed by subsequent cycles applied to assess the effects of quality improvement initiatives. PQI Project participants should be familiar with this process.



PLAN. Identify an area of your practice judged to be in need of improvement and devise a measure to assess the degree of need. Then develop a plan to implement the measure and obtain the required data. Finally, set a target or goal to be reached for the measure.

DO. Set your plan in motion and collect data.

STUDY. Determine how well your measure compared to the desired goal. Explore root causes for lacking goal achievement.

ACT. Consider what can be done to address the root causes and develop an improvement plan to implement in the next PDSA cycle.

After implementing your improvement plan, begin another PDSA cycle to assess the degree of any gain achieved. The cycle can be used continuously until you reach the goal, or employed intermittently to document the stability of any gain achieved. More detailed PDSA information is given in the specific sections to follow, with generic templates that can be used as step-by-step guides in completing your projects.

PQI Participation Choices

To give diplomates PQI Project opportunities that best suit their particular needs and practice situations, the ABR has developed three different pathways for participation:

- **Individual PQI Projects** (*see page 3*)
- **Group PQI Projects** (*see page 5*)
- **Institutional/Organizational PQI Projects** (*see page 7*)

The following sections provide the details of these choices and instructions for fulfilling the requirements of each

pathway.

Participating as an Individual: Part 4 Standards for Individual PQI Projects

In some practice settings, diplomates may not have colleagues with the similar Part 4 interests necessary to perform PQI Projects as a group, or diplomates may have subspecialty PQI requirements that are not shared by practice associates. In these and other situations, individual PQI participation is appropriate.

Getting to Work: Performing an Individual PQI Project

PQI Projects may be selected from a variety of existing projects sponsored by national organizations and societies or self-designed by the diplomate.

- *Sponsored PQI Projects, including registries*, are preferred for use in MOC by either individuals or groups. The ABR has approved these projects for its diplomates to use, and they are listed on the ABR website. They have standardized formats and offer project-specific templates to be followed throughout their completion. Such projects often address significant, common radiological care issues, and participation may aid in improving not only the diplomate's own practice, but also in understanding the impact of quality improvement efforts on a national level.
- *Self-Designed Projects* are best suited for individual PQI participants. These are conceived and formatted by the diplomate to fulfill a perceived or documented quality issue in his or her practice. Such projects do not require approval for use; however, certain constructs in the design and execution of the project must be observed (as specified below), and documentation with record-keeping is required in case they are needed for an audit.
- *Designing Your Own PQI Project*. A number of elements should be considered when selecting a suitable topic and performing a self-designed PQI Project. The following presents a step-by-step process for project selection, development, and completion—the **"Plan-Do-Study-Act" cycle**—which is followed until the project is concluded.

BASELINE PDSA CYCLE (Cycle #1)

PLAN. This first step involves selecting a project area of interest (topic) relevant to your practice that you would like to improve and that is amenable to repeated measurement. In doing so, it is often helpful to evaluate your practice in the light of the six Institute of Medicine Quality Aims: What about your practice could be made safer, timelier, more efficient, more effective, more patient centered, or more equitable? You should choose a topic that has the potential to make an improvement. Because the purpose of PQI is to address and improve real issues in your practice, performance topics that do not present challenges or perceived gaps in practice are not appropriate for PQI Projects.

Your next task is to devise an appropriate measure to gauge the issue you have selected. After you adopt a measurement, set a target level of performance desired in your practice. It is also helpful to predict what you believe your measure will show when applied to your practice. If you predict that your goal will be met on initial measurement, then this is likely not a suitable topic, and you should choose another one.

Examples include the following:

- *Area of Interest (Topic):* "Time Out" at Interventional Radiology Procedures
- *Quality Question:* In my practice, in what percentage of interventional radiology procedures was a "time out" performed?
- *Measurement to Be Taken:* Number of procedures in which a "time out" occurred/total number of interventional

radiology procedures x 100%.

- *Desired Target Level (Goal) of Performance*: “Time out” before beginning a procedure occurs in 100% of cases.
- *Baseline Measurement Prediction*: I believe that, upon initial measurement, “time out” before beginning of procedure will have occurred in 70% of cases.

Devise a plan or process for collecting the data.

DO. Put your plan into action, making baseline measurements in an unbiased manner and for an appropriate number of cases/data points. Collect your data.

STUDY. Analyze your baseline data and compare the data with both the predicted result and the desired performance target. Summarize your conclusions and what you have learned. One of two results will be pertinent:

- If the results **did not** meet your performance target, determine the factors to which you attribute the result and examine all potential root causes (*then proceed to **Step IV, ACT***).
- If, unexpectedly, the results **did** meet the performance target, institute a plan to sustain the gain and re-measure at appropriate intervals. *Then you must attest to project completion on myABR.*

ACT. Devise a plan for performance improvement that addresses the perceived root causes for not achieving the performance target. Implement your improvement plan before re-measurement.

POST-IMPROVEMENT PLAN PDSA CYCLE (CYCLE #2)

After implementing the improvement plan, repeat the PDSA cycle by:

- making a new set of measurements in an appropriate number of cases/data points;
- analyzing the re-measurement data; and
- determining whether the project goal has been met or whether additional action is needed. The PDSA cycle can be repeated until the goal is met, or until an endpoint is otherwise determined.

After you have reached your goal, make the improved process a standard practice. Measuring the improved process intermittently through a PDSA cycle can help ensure that the gain will be sustained.

Self-reflection

When you complete your project, you must prepare a short paragraph of self-reflection, stating the way(s) in which the project positively impacted your practice and/or your patients.

ABR Individual PQI Project Template

To assist individual participants in following and documenting the required process, the ABR has composed an optional digital template ([PQI Project Recording Template for Individuals](#)), which may be used in completing PQI Projects. Society-sponsored PQI Projects generally provide templates to be used in completing the projects. If not, the ABR template may be used as appropriate.

Fulfilling the MOC PQI Requirements

Don't forget that you must attest to completing your PQI Project in myABR.

Participating as a Group of Diplomates: Part 4 Standards for Group PQI

In response to requests from a number of practices to complete quality improvement initiatives as a group or groups of diplomates within a practice, the ABR created a special category of MOC Part 4 participation. Group participation in PQI is an important option because its scale is well suited to address systems-based problems. Thus, it holds tremendous potential as a multiplier of MOC's power to advance healthcare quality and safety. Group participation can also be more convenient and manageable for administrative purposes (see www.theabr.org/moc-team-tracker).

What Constitutes a Group?

The ABR understands that a wide variety of group practice settings must be recognized and accommodated. Thus, for purposes of Group PQI Project participation, the ABR has defined "group" as "two or more diagnostic radiologists, radiation oncologists, or medical physicists of the same or different disciplines, sharing a common central organizational structure, who work together to provide patient care, regardless of individual contractual affiliations or relationships. These diagnostic radiologists, radiation oncologists, or medical physicists may provide services at single or multiple facilities or locations in a variety of clinical settings, including hospitals, offices, or patient-imaging centers."

Because Group PQI may inadvertently distance some participants from an intimate, hands-on experience, certain project-level and diplomate-level standards must be applied to ensure meaningful participation.

Group PQI Process Standards

A group participation quality improvement project shared among diagnostic radiologists, radiation oncologists, or medical physicists should have the potential to impact their individual practice behavior and/or system environments within the confines of their group practice. If a group of radiologists decides to participate in a systems-based PQI initiative, the following guidelines must be followed for all participants to receive PQI credit. These standards are intended to ensure meaningful participation of diplomates in group PQI.

One radiologist, radiation oncologist, or physicist who is participating in MOC must be identified as the project or team leader for the group project. This will facilitate organizing meetings; taking attendance and keeping minutes of meetings; and coordinating data collection, analysis and review, as well as improvement planning and implementation.

- Each participating radiologist's name must be documented, along with project title, project description, and the start and end dates for the project.
- Credit for individual participation in a Group PQI Project requires attendance at three or more group meetings (as described below for "Group-Designed Project Criteria"), with minutes taken and attendance documented for each participant. Such meetings are mandatory regardless of whether a society-sponsored project, registry, or group-designed project is employed.
- Each participant must have access to all project documentation, including meeting minutes and any additional relevant data, which will facilitate reporting to the ABR in the event of an audit.
- Each participant must fulfill meaningful participation requirements and, when a PQI Project is completed, prepare a short paragraph of self-reflection, stating the way(s) in which the project positively impacted his or her practice and/or patients.
- Final sign-off of the project leader is required before receiving ABR MOC Part 4 credit.
- Each radiologist participating in and completing the project will receive individual PQI credit from the ABR after

an attestation is completed by the participant through his or her myABR account.

Group PQI Project Standards

As with Individual PQI Projects, Group PQI Projects may be self-designed by the diplomates or selected from a variety of existing projects sponsored by national organizations and societies. However, for Group PQI, nationally endorsed projects that include measures directly related to patient care (outcome or process) are preferred. The goals and measures of any project should be relevant to each diplomate's practice, with the potential to improve care.

- *Society-sponsored, pre-approved PQI Projects, including registries*, as listed on the ABR website, may be appropriate if the group feels the project is relevant to its practice. The goals and metrics of these projects are specified in detail for each project. It is also acceptable to use such projects as a basis for designing a Group PQI initiative that is more pertinent to a particular group's clinical practice.
- *Group-Designed PQI Projects* are conceived and formatted by the group to address a quality or safety gap in the group's practice. Such projects do not require approval for use. However, certain constructs in the design and execution of the project must be observed, and the development process must be documented. The "Plan-Do-Study-Act" cycle, as described for Individual PQI Projects and as modified below for use by Group PQI efforts, must be followed. A major distinguishing feature of Group PQI, as compared to Individual PQI, is the requirement of group meetings to ensure meaningful engagement of participants in the process. Group meetings also promote productive interactions among the participants in performing quality measurements and assessments and implementing practice-improvement actions relevant to the system in which the participants practice.

Group-Designed Project Criteria

BASELINE PDSA CYCLE (Cycle #1)

PLAN. Identify project, metrics, and target (**Group PQI Meeting #1**)

Select a topic area in which your practice group would like to see your practice improve, and within it, decide on a systems-based challenge that is relevant to your practice. The purpose of PQI is to address and improve real issues in your practice; therefore, performance topics that do not present challenges or perceived gaps in practice are not appropriate as subjects for PQI Projects.

- Decide specifically what your practice group will measure to assess current performance and future improvement and create a data collection form to record the measurements (if one does not already exist).
- Determine an appropriate desired project target that will help in your evaluation after the project has been completed.
- Determine a prediction of what the baseline measurement result will be to help align perception with reality during data analysis.

DO. Data collection.

Make a baseline measurement in an appropriate number of cases drawn in an unbiased manner.

STUDY. Data Analysis (**Group PQI Meeting #2**)

Your practice group comes together to review and analyze the baseline data collected to date, discuss the implications of results for the practice, and determine the perceived root causes for not meeting the performance measurement target/goal. Compare the results with the predicted measurement results.

ACT. Action Plan (Group PQI Meeting #3)

If you have not met your measurement target, devise an improvement plan addressing the root causes, as well as a process for plan implementation. Proceed to PDSA Cycle #2. **If you have met your measurement target**, terminate this project, select another topic, and proceed with a new project.

POST-IMPROVEMENT PLAN PDSA CYCLE (Cycle #2)

After establishing baseline results, conduct a second PDSA cycle to assess the impact of the plan on the baseline measurement.

PLAN. Implement the improvement plan and confirm your data collection process.

DO. Collect re-measurement data.

STUDY. Analyze re-measurement data.

ACT. Project decision point (Group PQI Meeting #4)

Analyze the post-improvement plan re-measurement data and determine whether your group has met its performance goal. If so, select another project to start as appropriate, while maintaining the gains made in the initial project. If not, continue with the initial project and repeat PDSA cycle(s) as necessary to reach the desired goal, or otherwise determine an endpoint.

Self-reflection

When the project is completed, each participant must prepare a short paragraph of self-reflection, stating the way(s) in which the project positively impacted his or her practice and/or patients.

ABR Group PQI Project Template

To assist group participants in following and documenting the required process, the ABR has composed an optional digital template ([PQI Project Recording Template for Groups](#)), which may be used in completing PQI Projects. Society-sponsored PQI Projects generally provide templates to be used in completing the projects. If not, the ABR template may be used as appropriate.

Fulfilling the MOC PQI Requirements

Each Group PQI participant must complete one PQI Project in the previous three years as a part of each MOC annual look- back. Don't forget that each group participant must record PQI Project completion in myABR.

Participating as an Institution/Health Care Organization:

ABR/ABMS Part 4 Standards for the Multispecialty MOC Portfolio Improvement Program

For information on the Multispecialty MOC Portfolio Improvement Program, see www.theabr.org/moc-institutional-pqi-projects. If you believe that your healthcare organization or institution may qualify as a Portfolio Sponsor, you can find more information at <http://mocportfolioprogram.org>. You may also contact ABMS or the ABR's MOC Help Desk (moc@theabr.org).